SEQUENCE LISTING

<110> Szostak, Jack W.
       Roberts, Richard W.
       Liu, Rihe

<120> SELECTION OF PROTEINS USING RNA-PROTEIN
    FUSIONS

<130> 00786/350005

<140> 09/247,190
<141> 1999-02-09

<150> 60/035,963
<151> 1997-01-21

<150> 60/064,491
<151> 1997-11-06

<150> 09/007,005
<151> 1998-01-14

<160> 38

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 76
<212> RNA
<213> Artificial Sequence

<220>
<223> Translation template

<400> 1
gggaggacga aauggaacag aaacugaucu cugaagaaga ccugaacaaa aaaaaaaaaa   60
aaaaaaaaaa aaaacc   76

<210> 2
<211> 10
<212> PRT
<213> Homo sapiens

<400> 2
Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
 1   5   10

<210> 3

1

```
<211> 153
<212> RNA
<213> Artificial Sequence

<220>
<223> Translation template

<400> 3
gggacaauua cuauuuacaa uuacaauggc ugaagaacag aaacugaucu cugaagaaga      60
ccugcugcgu aaacgucgug aacagcugaa acacaaacug gaacagcugc guaacucuug     120
cgcuaaaaaa aaaaaaaaaa aaaaaaaaaa acc                                  153


<210> 4
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Random peptide

<221> VARIANT
<222> (1)...(27)
<223> Xaa is any amino acid.

<221> VARIANT
<222> (1)...(34)
<223> Xaa = Any Amino Acid

<400> 4
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1               5                  10                  15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gln Leu Arg Asn Ser
            20                  25                  30
Cys Ala


<210> 5
<211> 25
<212> RNA
<213> Tobacco Mosaic Virus

<400> 5
gggacaauua cuauuuacaa uuaca                                            25


<210> 6
<211> 10
<212> RNA
<213> Escherichia coli

<400> 6
ggaggacgaa                                                            10
```

```
<210> 7
<211> 34
<212> PRT
<213> Homo sapiens

<400> 7
Met Ala Glu Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Leu Arg Lys
1               5                   10                  15
Arg Arg Glu Gln Lys Leu Lys His Lys Leu Glu Gln Leu Arg Asn Ser
            20                  25                  30
Cys Ala


<210> 8
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Translation template


<400> 8
aaaaaaaaaa aaaaaaaaaa aaaaaaacc                                    29

<210> 9
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Translation template

<400> 9
aaaaaaaaaa cc                                                      12

<210> 10
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Translation template

<400> 10
cgcggttttt attttttttt ttcc                                         24

<210> 11
<211> 42
<212> RNA
<213> Artificial Sequence
```

```
<220>
<223> Translation template

<400> 11
ggaggacgaa augaaaaaaa aaaaaaaaaa aaaaaaaaaa cc                          42


<210> 12
<211> 42
<212> RNA
<213> Artificial Sequence

<220>
<223> Translation template

<400> 12
ggaggacgaa cugaaaaaaa aaaaaaaaaa aaaaaaaaaa cc                          42


<210> 13
<211> 42
<212> RNA
<213> Artificial Sequence

<220>
<223> Translation template

<400> 13
ggaggacgaa augaaaaaaa aaaaaaaaaa aaaaaaaaaa cc                          42


<210> 14
<211> 36
<212> RNA
<213> Artificial Sequence

<220>
<223> Translation template

<400> 14
ggaggacgaa cugaaaaaaa aaaaaaaaaa aaaacc                                 36


<210> 15
<211> 33
<212> RNA
<213> Artificial Sequence

<220>
<223> Translation template


<400> 15
ggaggacgaa cugaaaaaaa aaaaaaaaaa acc                                    33
```

4

```
<210> 16
<211> 30
<212> RNA
<213> Artificial Sequence

<220>
<223> Translation template

<400> 16
ggaggacgaa cugaaaaaaa aaaaaaaacc                                         30

<210> 17
<211> 159
<212> RNA
<213> Artificial Sequence

<220>
<223> Translation template

<221> misc_feature
<222> (1)...(289)
<223> n = A,T,C or G

<400> 17
gggacaauua cuauuuacaa uuacaaugnn snnsnnsnns nnsnnsnnsn nsnnsnnsnn       60
snnsnnsnns nnsnnsnnsn nsnnsnnsnn snnsnnsnns nnsnnsnnsc agcugcguaa      120
cucuugcgcu aaaaaaaaaa aaaaaaaaaa aaaaaaacc                            159

<210> 18
<211> 64
<212> DNA
<213> Homo sapiens

<400> 18
gttcaggtct tcttgagaga tcagtttctg ttccatttcg tcctccctat agtgagtcgt       60
atta                                                                  64

<210> 19
<211> 18
<212> DNA
<213> Homo sapiens

<400> 19
taatacgact cactatag                                                    18

<210> 20
<211> 12
<212> PRT
<213> Homo sapiens

<400> 20
```

Met Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn
 1   5   10

<210> 21
<211> 99
<212> DNA
<213> Homo sapiens

<400> 21
agcgcaagag ttacgcagct gttccagttt gtgtttcagc tgttcacgac gtttacgcag   60
caggtcttct tcagagatca gtttctgttc ttcagccat   99

<210> 22
<211> 21
<212> DNA
<213> Homo sapiens

<400> 22
agcgcaagag ttacgcagct g   21

<210> 23
<211> 63
<212> DNA
<213> Homo sapiens

<400> 23
taatacgact cactataggg acaattacta tttacaatta caatggctga agaacagaaa   60
ctg   63

<210> 24
<211> 33
<212> PRT
<213> Homo sapiens

<400> 24
Met Ala Glu Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Leu Arg Lys
 1   5   10   15
Arg Arg Glu Gln Leu Lys His Lys Leu Glu Gln Leu Arg Asn Ser Cys
             20   25   30
Ala

<210> 25
<211> 127
<212> DNA
<213> Artificial Sequence

<220>
<223> Primers for RNA pool

<223> n = a, t, c, or g. s = g or c.

6

<400> 25
ccctgttaat gataaatgtt aatgttacnn snnsnnsnns nnsnnsnnsn nsnnsnnsnn   60
snnsnnsnns nnsnnsnnsn nsnnsnnsnn snnsnnsnns nnsnnsgtcg acgcattgag   120
ataccga   127

<210> 26
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Primers for RNA pool

<400> 26
taatacgact cactataggg acaattacta tttacaatta ca   42

<210> 27
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Primers for RNA pool

<400> 27
agcgcaagag ttacgcagct g   21

<210> 28
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA splint

<400> 28
tttttttttt agcgcaaga   19

<210> 29
<211> 18
<212> DNA
<213> Homo sapiens

<400> 29
gtggtatttg tgagccag   18

<210> 30
<211> 40
<212> DNA
<213> Phage T7

<400> 30
taatacgact cactataggg acacttgctt ttgacacaac   40

<210> 31
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA splint

<400> 31
tttttttttt gtggtatttg   20

<210> 32
<211> 124
<212> RNA
<213> Homo sapiens

<400> 32
gggacaauua cuauuuacaa uuacaauggc ugaagaacag aaacugaucu cugaagaaga   60
ccugcugcgu aaacgucgug aacagcugaa acacaaacug gaacagcugc guaacucuug   120
cgcu   124

<210> 33
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA splint

<223> n = a, t, c, or g.

<400> 33
tttttttttt nagcgcaaga   20

<210> 34
<211> 123
<212> DNA
<213> Homo sapiens

<220>
<223> n = a, g, t, or c. s = c or g.

<400> 34
agcttttggt gcttgtgcat csnnsnnsnn snnsnnsnns nnsnnsnnsn nsnnsnnsnn   60
snnsnnsnns nnsnnsnnsn nsnnsnnsnn snnsnnsnns nnctcctcgc ccttgctcac   120
cat   123

<210> 35

<211> 21
<212> DNA
<213> Homo sapiens

<400> 35
agcttttggt gcttgtgcat c   21

<210> 36
<211> 63
<212> DNA
<213> Homo sapiens

<400> 36
taatacgact cactataggg acaattacta tttacaatta caatggtgag caagggcgag   60
gag   63

<210> 37
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA splint

<223> n = a, t, c, or g.

<400> 37
tttttttttt nagcttttgg tgcttg   26

<210> 38
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus my c epitope

<223> Xaa at 2 is Gln or Glu; Xaa at 10 is Leu or Met;
      Xaa in all other positions can be any amino acid.

<400> 38
Xaa Xaa Xaa Leu Ile Ser Glu Xaa Xaa Xaa
 1   5   10